WHITTEMORE COMPANY MATERIAL SAFETY DATA SHEET

SECTION 1 - Chemical Product and Company Identification
Product Identifier: Vermiculite, All Grades: Masonry Insulation, Attic Insulation, Concrete Grade, Pool Base, D3, D4, A1, A2, A3, A4
Product Class: Hydrated Laminar Magnesium Aluminum Iron Silicate
Product Use: Insulation, Construction, Industrial, and Horticultural Applications

Whittemore Company, Inc.
30 Glenn Street
Lawrence, MA  01843
Emergency Telephone Number:  978-681-8833
Fax Number:  978-682-3413

Supplier's Name (if different)
- Street Address
- City, Province/State, Postal/Zip Code
- Emergency Telephone Number
- Fax Number

Preparation date of MSDS:  October 17, 2011
MSDS Prepared By:  Kenneth Wiener  (Phone:  310-377-7977)

SECTION 2 – Composition/Information on Ingredients
Product Description/Components:  Exfoliated vermiculite powder or granules, CAS# 1318-00-9

<table>
<thead>
<tr>
<th>Hazardous Ingredients</th>
<th>ACGIH</th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>TLV, mg/cu.m.</td>
<td>NIOSH, mg/cu.m</td>
<td>OSHA PEL, mg/cu.m</td>
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<tr>
<td>Quartz</td>
<td>14808-60-7</td>
<td>&lt;0.1</td>
<td>0.025 (Respirable)</td>
<td>0.05 (Respirable)</td>
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<tr>
<td>LD$_{50}$: Not Available</td>
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<tr>
<td>LC$_{50}$: Not Available</td>
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</tbody>
</table>

SECTION 3 – Hazards Identification
Route of entry:
- Skin contact: Repeated or prolonged contact may cause irritation
- Skin absorption: N/A
- Eye contact: May irritate or injure eyes, mechanically
- Inhalation: Upper Respiratory Irritant: May aggravate pre-existing respiratory conditions.
- Long-term inhalation of respirable crystalline silica can cause disabling lung disease (silicosis).
- Ingestion: LD$_{50}$ not established, presumed over 2000 mg/kg

Emergency Overview: The fine particle size products represent inhalation hazards that can readily be controlled with appropriate dust protection equipment. Avoid processes that generate unnecessary dust.

WHMIS Symbols: 
Potential Health Effects: See above regarding long term exposure: skin irritation, silicosis and eye irritation
SECTION 4 – First Aid Measures
Skin Contact: Wash off with soap and water
Eye Contact: Flush eyes with generous amounts of water for at least 5 minutes. Inhalation: Remove to fresh air. Seek medical attention if victim is not breathing or uncomfortable.
Ingestion: Do not induce vomiting. Seek medical attention if victim is not breathing or uncomfortable.

SECTION 5 - Fire Fighting Measures
Flammable: No
Means of Extinction: Use extinguishing media appropriate for surrounding material.
Flashpoint (°C) and Method (oc or cc): N/A
Upper Flammable Limit (% by volume): N/A
Lower Flammable Limit (% by volume): N/A
Autoignition Temperature (°C): N/A
Explosion Data - Sensitivity to Impact: N/A
Explosion Data - Sensitivity to Static Discharge: High airborne concentrations of dusts are susceptible to explosions.
NFPA: Health: *(Refer to MSDS), Flammability: 0, Reactivity: 0, Other: None
HMIS Ratings: Health: *(See MSDS), Flammability: 0, Reactivity: 0, Personal Protection: E

SECTION 6 - Accidental Release Measures
Leak and Spill Procedures: Normal clean-up procedures. Care should be taken to avoid causing dust to become airborne. Vacuum cleaning systems are recommended. Wetting spilled material with water may control dust and make clean up easier.

SECTION 7 - Handling and Storage
Handling Procedures and Equipment: Avoid creating unnecessary dust
Storage Requirements: Store with other dusty materials, away from products that could be affected by dust.

SECTION 8 - Exposure Control/Personal Protection

EXPOSURE LIMITS
ACGIH TLV: 10 mg/m³ total dust
3 mg/m³ respirable dust
OSHA PEL: 15 mg/m³ total dust
5 mg/m³ respirable dust

ENGINEERING CONTROLS
General: Good housekeeping rules apply
Local Exhaust from work stations using this material
Recommended Personal Protective Equipment:
• Plastic or Rubber Gloves if skin irritation occurs
• Respirator – NIOSH/OSHA approved dust respirator adequate for contaminant concentrations encountered.
• Eye protection recommended
• Disposable footwear for frequent handling of this material
• Coveralls for frequent handling of this material
SECTION 9 – Physical and Chemical Properties
Physical State: Solid Powder or granules
Odor and Appearance: Tan powder or granules with no odor
Odor Threshold (ppm): N/A
Specific Gravity: 2.5 to 2.7
Vapor Density (air=1): N/A
Vapor Pressure (mmHg): N/A
Evaporation Rate: N/A
Boiling Point (°C): N/A
Freezing Point (°C): N/A
pH: 6.5 – 7.5, as 10% slurry in distilled water
Coefficient of Water/Oil Distribution: N/A
Solubility in Water: Negligible

Visual Identification Recommended

SECTION 10 - Stability and Reactivity
Chemically Stable?: Yes
Incompatibility with other substances
Yes: Hydrofluoric acid (HF)
Reactivity, and under what conditions?: Toxic silicon tetrafluoride gas will result with contact with hydrofluoric acid.
Hazardous Decomposition Products: See above

SECTION 11 - Toxicological Information
Effects of Acute Exposure: Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), or in case of inhalation (irritant).

Effects of Chronic Exposure:
Irritancy of Product: Potential IRRITANT for Skin Sensitization,
Respiratory Sensitization: Upper Respiratory Irritant: May aggravate pre-existing respiratory conditions. Long-term inhalation of respirable crystalline silica can cause disabling lung disease (silicosis)
Carcinogenicity: These products contain less than 0.1% crystalline silica, and few particles of respirable size, hence present very low risk.
IARC: Not reviewed
ACGIH: PNOS (Particulates Not Otherwise Specified), Not carcinogenic
Reproductive Toxicity: Not available
Teratogenicity: Not established
Embryotoxicity: Not available
Mutagenicity: Ames: Negative results reported (Salmonella typhimurium, Metabolic Activation: with/without)

SECTION 12 – Ecological Information
Aquatic Toxicity: Low hazard for usual industrial or commercial handling. Approved for use in soils
SECTION 13 – Disposal Considerations
Waste Disposal: Dispose of this product in accordance with all applicable local, state and Federal regulations.

SECTION 14 – Transport Information
Special Shipping Information
DOT: No special requirements
IMO: Non-hazardous
ICAO: Non-hazardous

SECTION 15 – Regulatory Information
WHMIS CLASSIFICATION: D2B (Toxic)
OSHA: Label as required by Hazard Communication Standard 29 CFR 1910.1200 (f) and applicable state and local laws and regulations
TSCA: Included as a naturally occurring material

SECTION 16 – Other Information
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by CPR.

Information provided in this document is believed to be accurate as of October 17, 2011 and may be subject to change without notice. The information is provided in good faith to comply with applicable federal and state laws. However, no warranty or representation with respect to such information is intended or given. It is the responsibility of the user to comply with all applicable federal, state, and local laws and regulations.